

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 25-40 in the reply filed on 08/20/2008 is acknowledged.

Examiner's amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
3. This application is in condition for allowance except for the presence of claims 41-44 non-elected without traverse. Accordingly, claims 41-44 have been cancelled.
4. The application has been amended as follows:

In the claims:

Cancel claims 41-44.

Allowable Subject Matter

5. Claims 25-40 are allowed.
6. The following is an examiner's statement of reasons for allowance: the prior of record fails to disclose the combination of the process steps of forming a semiconductor device recited in the base claims, including the combination of the process steps comprising: a third step of grinding and/or polishing the main surface side different from the epitaxially grown main surface of the substrate; and a fourth step of division into

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individual chips by applying stress to said separation grooves, wherein the second step irradiates the laser beam from the semiconductor side of the semiconductor wafer, and after the second step, further including a fifth step of forming trenches, in which at least the n-type layer is exposed, being corresponded to the positions for forming the separation grooves (claim 25); a third step of grinding and/or polishing the main surface side different from the epitaxially grown main surface of the substrate; and a fourth step of division into individual chips by applying stress to said separation grooves, wherein the second step forms a separation groove of the form of a polygonal line that is bent, forms a plurality of separation grooves of the form of a polygonal line that is bent in a form of being translated in parallel and, then, forms linear separation grooves by connecting every other bending points of the neighboring separation grooves of the form of a polygonal line (claim 30); a third step of grinding and/or polishing the main surface side different from the epitaxially grown main surface of the substrate; and a fourth step of division into individual chips by applying stress to said separation grooves, wherein the second step forms first separation grooves of the form of a broken line, forms second separation grooves of the form of a broken line that intersect the first separation grooves of the form of the broken line at a first angle, and forms third separation grooves of the form of a broken line that intersect the second separation grooves of the form of the broken line at a second angle and further intersect the first separation grooves of the form of the broken line at a third angle, the sum of the first angle, the second angle and the third angle being 180 degrees (claim 31); a third step of grinding and/or polishing the main surface side different from the epitaxially grown

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main surface of the substrate; and a fourth step of division into individual chips by applying stress to said separation grooves, wherein the chip shape is substantially a pentagonal shape and the second step forms separation grooves of the hexagonal shape by forming separation grooves of the form of a polygonal line that is bent, forming separation grooves of the form of a plurality of polygonal lines that are bent in a form of being translated in parallel and, then, forming linear separation grooves by connecting every other bending points of the neighboring separation grooves of the form of polygonal lines and, further, forms linear separation grooves connecting the opposing two sides of the separation grooves of said hexagonal form (claim 36); a third step of grinding and/or polishing the main surface side different from the epitaxially grown main surface of the substrate; and a fourth step of division into individual chips by applying stress to said separation grooves, wherein the chip shape is substantially a pentagonal shape and the second step forms separation grooves of the form of the hexagonal shape by forming first separation grooves of the form of a broken line, forming second separation grooves of the form of a broken line that intersect the first separation grooves of the form of the broken line at a first angle, and forming third separation grooves of the form of a broken line that intersect the second separation grooves of the form of the broken line at a second angle and further intersect the first separation grooves of the form of the broken line at a third angle, the sum of the first angle, the second angle and the third angle being 180 degrees and, further, forms linear separation grooves connecting the opposing two sides of the separation grooves of said hexagonal form (claim 36).

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoai v. Pham whose telephone number is 571-272-1715. The examiner can normally be reached on M-F.

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thao Xuan Le can be reached on 571-272-1708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hoai v Pham/
Primary Examiner, Art Unit 2892